DOCUMENT RESUME

ED 337 189 IR 053 791

TITLE The White House Conference on Library and Information Services. July 9-13, 1991. Discussion Papers.
INSTITUTION White House Conference on Library and Information Services.
PUB DATE 91
NOTE 19p.; For additional conference-related materials, see IR 053 790-804.
PUB TYPE Collected Works - General (020)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Conferences; *Democracy; Information Services; *Library Role; Library Services; *Literacy; Policy Formation; *Productivity
IDENTIFIERS *White House Conference Library Info Services

ABSTRACT

This collection of discussion papers focuses on the role of library and information services in the three main topic areas for the conference: Enhancing Literacy, Increasing Productivity, and Strengthening Democracy. The collection is one of many publications and projects either in support of, or which will result from, the second White House Conference on Library and Information Services (WHCLIS2). The 1991 Conference is charged with developing recommendations for the further improvements of the nation's library and information services. The following essays make up this collection: (1) "The Library in Service to Democracy" (Timothy S. Healy); (2) "Literacy in an Information Society" (Patricia Senn Breivik); and (3) "Productivity in the Information Society" (Paul E. Shay). (MAB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED337189

DEMOCRACY

LITERACY

PRODUCTIVITY

THE WHITE HOUSE CONFERENCE ON LIBRARY AND INFORMATION SERVICES

JULY 9-13, 1991

Discussion Papers

IR053791

BEST COPY AVAILABLE

Preface

This collection of discussion papers on the role of Library and Information Services in **furthering literacy, increasing productivity and strengthening democracy** is one of many publications and projects either in support of or which will result from the White House Conference on Library and Information Services.

The 1991 Conference is mandated by Public Law 100-382 and conducted under the direction of the National Commission on Libraries and Information Science. It is charged with developing recommendations for the further improvements of the nation's library and information services.

By focusing on three main topic areas as they relate to library and information services--literacy, productivity and democracy--the Conference stands on the cutting edge of issues critical to the United States now and in the 21st century.

The process, which began last year, includes preconference activities in 59 states and U.S. territories and affords thousands of citizens the unique opportunity to play a hands-on role in the public policy making process. The recommendations created by the Conference will be forwarded to the President and Congress for their action. Numerous recommendations created during preconferences will be forwarded to state officials for innovations in services at that level.

The 1991 White House Conference on Library and Information Services is the second of its kind. The first, held in 1979, created specific recommendations which resulted in intensified efforts to use technology to preserve books and papers, increased use of satellite communications, an active role for libraries in adult literacy training, improved services for the institutionalized, adoption of standards for telecommunication and computer technology and federal assistance in the provision of library services to Native Americans.

These discussion papers were written at the request of the White House Conference staff. We thank the authors, Dr. Patricia Senn Breivik, Paul E. Shay, and Dr. Timothy S. Healy for their efforts. This publication is designed to generate thought and debate. The opinions stated are those of the authors, and do not necessarily reflect the opinions of the White House Conference on Library and Information Services Advisory Committee or staff.

THE LIBRARY IN SERVICE TO DEMOCRACY

by Timothy S. Healy
President, The New York Public Library

Libraries, like universities, exist to serve the societies that support them. Librarians, thus, are engaged in what modern terminology calls a *service industry*. In a democracy, however, the simple word *service* has another dimension to it. Under any republican form of government, where knowledge and understanding must be attributed to individuals as citizens and voters, the service rendered by libraries is as necessary as that of the press, the colleges or the schools. In less political and more philosophical terms, libraries exist essentially in **service to freedom.**

Let me first of all give a quick and dirty definition of The New York Public Library. It is public only in the old Roman sense, that it exists for the people, is open to all the people and has disposed itself across the landscape to make that openness a geographic reality. In every other aspect it is private. It is governed by a self-perpetuating Board not appointed or approved by any public or political authority. The heart of its being, its great research collections, are supported only by private dollars, in the form of endowment, gifts and what small revenue The Library can itself engender.

The full corporate title identifies it as The Astor, Lenox and Tilden Foundations, a potent combination of two wealthy collectors and one able politician. The Library has three great central collections, the comprehensive one at 42nd Street and Fifth Avenue, a research collection in the performing arts located at Lincoln Center and the Schomburg Center for Black Culture smack in the middle of Harlem. All of these are private, and except for the upkeep of their buildings, privately funded. In addition, The Library has 83 branches spread throughout the boroughs of Manhattan, the Bronx and Staten Island all run under contract With the city.

One further short paragraph in defining my turf. The Library has some nine million volumes in its central collections and another nine million in its circulating collections. The total number of objects and artifacts (not strictly defined as books) is over 60 million. The Library subscribes to 169,000 periodicals. It is the only great library in the United States to have a branch system reaching out to its city and the only one to lack either a special clientele (like the Library of Congress) or an arbitrarily limited one (like Harvard and other university libraries).

The entire enterprise is a service industry. We serve in three ways. First we serve through great collections in an enormous variety of subjects and some 3000 languages and dialects. Secondly we serve by each day's work; we answer questions, we follow up inquiries, we give aid to scholars and undergrads, to commercial researchers and poets, to everyone who asks. Finally, and in a republic this service is the most important, we serve by our very being.

The service of great collections is fairly obvious. They provide information for immediate use, they buttress the longer reach of scholarship, and experience, not on *a priori*, tells us that we are of enormous use to novelists, playwrights, essayists and poets. As always in New York, things are also complicated. So I should add one further service, our labor to remake the American imagination by integrating into it the Black experience of the United States. We do that most specifically at the Schomburg Center, but the very existence of such a center with its several million items influences the rest of the system and the city.

When it comes to the direct service of the citizens of the city, we are really as multiplex as we are in research. We put together the only complete book, in both English and Spanish, of all the services, both public and private, available to citizens of the city. But most of this direct service is personal, answering questions, enabling research, helping readers through bibliographies. We respond to over five million inquiries in person or by telephone every year, and our people are more responsible for what little organization many American Ph.D. theses have than anyone is prepared to credit. In addition,

we answer readers' puzzlements, sacred and profane, earth-shattering and trivial. There are no written languages that are not available to our readers, and we are the nation's premiere provider of bibliographies for children, pre-literate, literate and teenaged.

I said before that our final and perhaps most important service was that of our very being. In some ways that service is clearly obvious. In parts of a city that speak of danger, squalor and despair, our branches, with their ordered ranks of books and helpful people speak of safety, of cleanliness, decency and, above all, of hope. In the most unlikely places on earth, some of the toughest parts of very tough cities indeed, we mount little Acropolis' that in a quiet way are shining glories on the landscape. A further condition needs to be understood. The service of our being is for free. Nobody pays to come to us, nobody pays to question us, nobody pays to borrow from us, unless they are dilatory in returning. Our open doors, our free service and the generosity of our people all teach one thing by themselves, and that thing is freedom.

I'm quite deliberately picking the tough anglo-Saxon word with its suggestive suffix rather than the more abstract and slippery Latin-French concept which English transliterates into the word *liberty*. In doing that I am paying honor to the genius of the language which remains blessedly anglo-Saxon. I also want to hold on to the three classic meanings of that suffix "dom." Thus, when I write of freedom, I am writing of a domain, a kingdom into which free entrance is granted. I am also writing of a state of being, a gift of person which anyone can claim. Finally, following the dictionary's order, I mean the collective world of all who share that gift and are citizens of that domain. Let us look for a minute at some of the philosophical implications of the word itself and of our teaching of it.

The library begins its work with children, and it is appropriate to start our reflections on freedom with a child's definition. That is what the Latins would call "freedom from" or, in perhaps more mature terms, freedom as escape. I have already mentioned the escape from danger, squalor and despair which a library by its very being offers. But we offer something deeper. The first freedom reading grants is freedom from ignorance. Knowing has been acknowledged as a human good ever since Aristotle and the Book of Genesis. Remember that the serpent, when he talked to Eve, promised, "you will know God," and that knowledge is a claim to equality. In great cities, probably the greatest escape we can provide is escape from prejudice, racism and slavery to slogans. If one can slip the bonds of space and time and thus enter a world that is neither immediate nor local, one has a fair start on understanding difference and accepting it.

It is hard for us to realize how savage is the pressure upon American citizens created by the media's focus on immediacy. Its strident accents, its pretended breathlessness, its pressure upon the passing moment are all quite literally mind-boggling. The first gift we offer our readers is escape from immediacy, into the past, or into the future, but escape nonetheless. Think of how far a good book can transport you from the city streets; how small a knowledge of history it takes to make one stand up and yell at the talking head of a pundit on a screen, "hold on a minute"; how very little poetry one must read in order to approach grief with respect rather than voyeurism; to know love with pride rather than titillation; to understand that anger, in individuals or in mobs, is more totally destructive of those who bear it than of those upon whom it bears. The child's definition of freedom as escape from restraint may be a naive and simple one, but it is one much needed in the great cities of the western world.

There is, of course, a second meaning of freedom and that is empowerment. A library invites the mind of teenager or adult to spread out, to follow bypaths and hidden lanes, to yield with a grace to temptation and, above all, to delve into complexity and ambiguity, the hallmarks of any mature mind. Both historical and topical richness lead any young mind (and any old one for that matter) to understand that knowledge is only deep if it is integrated and thus to search out the hooks on every bit of lore that tie it to so many other bits of lore. Of course, one can lose the motive of action in this, but no philosopher has ever claimed that the mind can guarantee either will or work, only that it should inform, structure and guide them.

There is further empowerment which all good liberal arts colleges give and which the library reinforces and deepens, and that is the rooted intellectual habit of questioning assumptions. The United States is thick with think tanks, many of them spawned by what General Eisenhower called the "military industrial complex," whose business in life is to grab hold of one or another set of assumptions and ride them hard across the intellectual landscape. It was a fine poet who asked, "but where's the bloody horse," without realizing that in the late 20th century, with many of the artifacts of governmental logic (as much

an oxymoron as military music), he was asking a question of deep pitch and moment.

Behind freedom as empowerment lies something more settled and less tied to immediacy than reflections on politics and strategy. The library offers to those who take it seriously a way of being, and that way is contemplative. Here again we can go back to Aristotle, or for that matter Thomas Aquinas, for whom contemplation is the only act of man that will begin in time and fill eternity. The one lesson Alexander's tutor strove to teach his charge was that the happiest activity of man is the fullest use of his highest faculties upon their worthiest objects. The freedom of empowerment that a depository of learning and wisdom like The New York Public Library offers sets the stage, provides the raw material, does everything but write the script for the contemplative mind at its thoughtful best.

The final freedom of which I spoke is freedom of possession, the freedom we mean when we offer someone the "freedom of the city." Here, too, the library has a major role to play, perhaps its most important. All civilizations are essentially age long and unbroken, although often interrupted, conversations. I am struck again and again as I grow older by one such conversation that takes up so large a part of American history, the endless chatter between James Madison and Alexander Hamilton on one side and Thomas Jefferson on the other. Every succeeding Supreme Court and Congress has echoed them, particularly men with the intelligence of William Brennan or Antoinin Scalia. America needs its young to enter into the company of such free men and women who have used their freedom, at times to their cost, to understand what they say and what they mean, to learn how precious even their speech was and is, and to resolve, each one for him or herself, that this conversation shall not cease.

This American conversation echoes two voices. On one side is the cool, rational analysis of James Madison, who could translate the ancient Christian and Jewish concept of original sin into the subtleties of "balance of power" so that the republic might shake and teeter, but would not topple. On the other side, sharper, more demanding, more violent, is the voice that runs through Jefferson's *Declaration of Independence*. *Declaration* and *Constitution* establish for us the two poles of a dialogue which has held together and divided the nation ever since its founding. On at least one occasion the poles crossed and dialogue turned to war, as North and South tore at teach other's vitals. More recently we have been more Jeffersonian, although the Virginia slave owner in him would probably not have sympathized with the slogans or responded to the deep religious thrusts of the civil rights movement. It is, however, his savage stress upon the dignity of the individual that lies behind those who shout in the darkness, as well as the wise men who try to answer them.

I am personally most comfortable in discussing freedom in terms of theology. It is so easy for the churches when they look to exercise an honest leadership to settle for only one-half of what was promised as "the image and likeness of God," human understanding. It is not popular theology these days to follow a different vision that lays its accent on the other half, freedom, with at least equal stress. Such tensions do not necessarily imply battle, although now they do. Even now both sides yearn for an impossible and ideal realization. If in this republic, we could ever truly tie human freedom and intelligence together, we would be fair candidates for what the serpent promised Eve, the knowledge of God.

There is another way that freedom as possession can be seen. It is the lover's freedom, structured by commitment, articulated by time and joy and pain, promising infinity. To revert again to the theological reading of that same statement, it is what devout Christians have meant for two millennia when they talked of the beatific vision. Freedom of possession is all we can ask of God and, rather more strikingly, all he ever promised us.

In everything I have said so far I may be revealing the bias of my own classical formation and my years of teaching literature in undergraduate colleges. Despite that, I do not feel that trying to lead a great library is exactly the same thing as trying to lead a college or university. As a matter of fact, without libraries, college and university mean very little, and their leadership is likely to be shrewdly unproductive. Where do I find the differences?

There are so many it's hard to know where to start. First of all, the college breaks its knowledge into tiny segments bound by time and limited by faculty competence, perhaps even more shrewdly limited by faculty consciousness of turf. The classroom can seldom offer more than skeleton and nerve, a few poems, a few scenes of a play, one or two chapters of a novel, a tiny moment in a long history, one central vision of a philosopher or a theologian. The library has no such limitations. It can summon up the rich complement of flesh, until our startled eyes see the fullness of beauty. A

library's promise is wholeness, a rather more satisfactory word than either *spread* or *integration*. In addition, the library honors autonomy far more than any college or university can afford to. The stimulation which leads one to read may initially come from outside, but ultimately learning has to do with curiosity, with interest, with insight, and all these are self-stimulated. Libraries don't lend themselves to prepping for examinations, except in the most superficial way, and thus they add another element of respect for autonomy because the pace of learning, its progress, its slow climb are all determined by the self. Finally and perhaps most richly of all, at least for those who have a clear memory of what it was like to be a doctoral student, the library never welcomes the humiliation of exams or grades. It is ultimately the self that has to make the judgment, "I have read enough" or the even tougher judgment, "I now know what I'm reading." There is to this a kind of fierce affirmation of autonomy. I remember the evening when I posed a question to my mentor at Oxford (one of the finest scholars I ever have or ever will know) and she turned to me with a slow smile and said, "You tell me. You know more about it than I do." That passing remark was the most terrifying single statement made to me in three long years in the toils of grace that Oxford weaves so skillfully around its students. It also gave me a great leap of pride, deeply conditioned by my absolute distrust of it and of myself.

There is one terrain on which college and library work together, where it is difficult to separate one strand from another, where we ought really to take them, good liberal arts college and rich library, as a continuum. Many years ago I sat in an excellent classical library swotting up Euripides' *Medea*, not for an examination, but because I wanted to read it. I had finished digging in the dictionary and I was trying to put the play together in my mind. Suddenly, in the late winter afternoon, quite marvelously I was transported eastward in space and backward in time. I could hear the flute and the little drum, could feel the warmth of the stone under my legs and of the sun on my back, and for one brief moment was not reading the play, but hearing and seeing it, not on the shores of the chill Hudson, but on a stony hill that faced the wine dark Aegean. I have been too busy most of my life often to touch such highs of contemplation, but that afternoon I did. There have been few other such moments of "intersection of the timeless with time" in a lifetime of poking at great literature. I have always found it interesting that most of the contemplative moments that paid off for me were in the library, not the lecture hall.

Every detail of the palatial New York Public Library Beaux Art building at Fifth Avenue and 42nd Street was planned by the architects, Carrère and Hastings. Obviously they designed the massive lions in front of the building, but they also designed the tables and chairs, the doorknobs and every bit of interior decoration. Over the mantelpiece in the Trustees Room they hung a replica of the cornerstone that says a few words about the building itself, but then defines it as "for the free use of all the people." At its simplest, that means that we can't (and we don't) charge admission. I want to read the simple adjective proleptically, as a challenge not a description. The dream of the Library, mine too now that I've grown enough in knowledge to share it, is that it can "in the prison of his days, teach the free man how to praise." The use of it can, indeed, make a people free.

Dr. Timothy S. Healy

Dr. Timothy S. Healy, President of the New York Public Library, is a long time teacher and educational administrator.

Healy began his collegiate teaching career at Fordam University. He was the Vice Chancellor for Academic Affairs and professor of English at The City College of New York from 1969 to 1976.

In 1976 Healy was named the President of Gerogtown University in Washington, DC. During his 13-year tenure Healy saw the University's endowment raise from $38 million to $225 million.

A prolific author, Healy has penned two books, John Donne: Selected Prose and John Donne: Ignatius His Conclave. He has additionally written for The New York Times, The London Times, The Washington Post, Newsweek, and The Chronicle of Higher Education.

Healy is the former director and chairman of the American Council on Education and the National Association of Indepedent Colleges and Universities.

LITERACY IN AN INFORMATION SOCIETY

by Dr. Patricia Senn Breivik
Towson State University
Towson, Maryland

Illiteracy. In our information society, it is an ugly, shameful word. It is a word that creates a range of feelings from rage to helplessness. Who cannot help but be moved by the mother who cannot read to her child or by the father who must shamefully and fearfully hide his inability to read from both his employer and his children? The emotional impact of such situations strikes deeply in the heart of each one of us and demands our sympathy.

In recent years, the plight of the illiterate has also elicited the dedicated work of thousands of volunteers, national organizations, newspapers and Mrs. Barbara Bush. Even the entertainment media have found it profitable to call attention to the daily problems confronting the illiterate with the 1990 movie, *Stanley and Iris*, in which Joan Fonda teaches an illiterate friend, played by Robert De Niro, to read, and the made for TV movie *Bluffing It*, in which Dennis Weaver plays an illiterate factory worker. All of this attention underscores that illiteracy is something that is simply unacceptable in a society like ours that is committed to the quality of life for each individual.

Literacy Today

The problem of illiteracy tugs at our hearts because of the helplessness of the individuals to function adequately in society and the isolation that it engenders. While no other aspect of literacy has moved people as deeply as illiteracy, there have been rallying cries for a wide array of other literacies –such as cultural, computer, information, scientific, technical, mathematical and global. For example, when tests documented that many school children did not know who the President of the United States was or where New York City was located, there was a cry for cultural and geographical literacy. We were all upset with these test results – at least as long as the press considered them good copy. Then, when Alan Bloom's book *The Closing of the American Mind* was published in 1987, cultural literacy was discussed at length at national educational conferences –at least as long as it was on the best sellers' list. Earlier many higher education institutions had jumped on the bandwagon of computers by rushing with great fanfare to require computer literacy for all of their students. However, because the colleges and universities most often focused their courses on programming, they soon realized their inappropriateness and quietly withdrew them over a period of years. After these and all of the other recent literacy calls to arms, life in America and life in American schools have gone on seemingly with as little change as the fading ripples caused by a pebble thrown into a lake.

These calls for more attention for the various literacies, however, parallel more generic concerns expressed by educators, business leaders and parents who have repeatedly asked for better thinkers, problem solvers and inquirers. Increasingly, because of the shrinking distances within our global community, these concerns have been exacerbated by the need to assimilate into our thinking processes information from societies around the world.

The one acknowledged common problem in all of these concerns is an awareness of the rapidly changing requirements for a productive, healthy and satisfying life. The second equally as important but seldom articulated problem is the huge, overwhelming amount of existing information that confronts everyone on a daily basis. It bombards us on every side, and to make matters worse, it comes in a bewildering array of formats. In addition to books and magazines, there are newspapers, television, videotapes, CD ROMs, online databases and

interactive videodiscs. Moreover, today's overly rich information environment requires everyone not only to be able to read but also to understand pictures, signs, graphs and statistics as well.

Fortunately, a growing number of people exists whose voices are beginning to be heard above the single issue literacy spokespeople. Although few in number, these leaders have begun to coalesce around the concept of information literacy and within the National Forum on Information Literacy. They are attempting to raise the awareness that literacy can no longer be considered merely the ability to read and memorize a base of knowledge; instead, it must become the ability to acquire and evaluate whatever information is needed at any given moment.

At one time, of course, people were considered literate if they could write their names, but as society become more complex, the definition gradually evolved to reflect the abilities needed to function within the changing society. Today, however, what those abilities are is anything but clear to most people. Exactly what abilities are required for modern literacy? Does it involve reading the classics or reading the latest news accounts from the Middle East? Does it include knowing all the important dates of the Revolutionary War or understanding how that war relates to the struggle for independence throughout Europe and the Soviet Union today? In other words, does modern-day literacy mean having the ability to read and memorize facts or knowing where to find the facts and knowing how to evaluate, integrate and use them?

Both the realities of our Information Age and the number of varying calls for literacy would argue that today's definition of literacy must include not just the ability to read, but also the ability to find and evaluate needed information so that the readers can function and work as productive members of society. When and if all American citizens can make decisions based on information they have found and evaluated, then all of the other literacies will have also been achieved. Because of this, those who have expanded the concept of literacy to include information literacy are actually supporting all forms of literacy within the larger context of today's information age. To them and to us, today's need is not limited by concern for global, cultural or scientific literacy, for example, but by the need to be effective information consumers in all fields.

As a result of this growing awareness of the need for information literacy throughout the United States, the American Library Association commissioned a group of nationally prominent leaders in education and librarianship to explore this issue. Their report, which was released in 1989, urged that:

> *To respond effectively to an ever-changing environment, people need more that just a knowledge base, they also need techniques for exploring it, connecting it to other knowledge bases, and making practical use of it. In other words, the landscape upon which we used to stand has been transformed, and we are being forced to establish a new foundation called information literacy. Now knowledge--not minerals or agricultural products or manufactured goods--is this country's most precious commodity, and people who are information literate--who know how to acquire knowledge and use it--are America's most valuable resource...*
>
> *Moreover, these same abilities empower and encourage people to search out and interact with the ideas and values of their own and others' cultures. This process deepens people's capacities to understand and position themselves within larger communities of time and place. By drawing on the arts, history, and literature of previous generations, individuals and communities can affirm the best in their cultures and determine the goals. Such affirmations are in keeping with the high value which Americans have.*

Current Challenges to Literacy

How is it, that with all of the focus on education, which started with *A Nation at Risk* in 1983, that America's most valuable resource, our young people, are doing so poorly in school? One reason for the failing report card is the fact that children are being poorly prepared to cope with the information realities of today's society. This situation is largely an outgrowth of the way in which education has taken place and continues to take place in most schools across the country. Teachers teach the way they were taught and within the traditional approach to teaching, the teacher is held forth as the font of all knowledge, providing prepackaged information to students in the form of lectures, textbooks, workbooks,

reading lists and lists of reserved materials. In addition, what problem solving that does occur takes place within artificially constructed and limited information environments that allow for only single "correct" answers. Such exercises bear little resemblance to problem solving in the real world where multiple solutions of varying degrees of usefulness must be pieced together – often from many disciplines and from multiple information sources, such as online databases, videotapes, government documents and journals.

In addition, current promotion and tenure systems in higher education reward the specialist, thus, creating a situation which encourages people to know more and more about less and less. The ultimate goal almost seems to be to know everything about nothing! The actual result is an increasingly fragmented knowledge base that all but defies the level of information connectivity required to address the complex problems confronting society today.

The drawbacks and problems inherent in prepackaging and fragmenting information in schools are reinforced outside of the school setting. In an attempt to consume only quick, easily managed segments of information, most people today have become dependent on the broadcast and print news media. There, of course, they find condensed, prepackaged information that is often mixed with personal opinion. Even if most people would be able to distinguish the biased opinions they hear, which they often cannot, few would know where to go to find a base of objective information.

A recent study in Alabama well illustrates the dangers engendered when society as a whole becomes dependent on a single information source. The study indicates that newscasters are spending less time on political and campaign coverage because opinion polls have shown that such news items are not popular with viewers. At the same time, a growing percentage of viewers are citing television as their single source for political information. From these studies, a thoughtful observer could draw a natural conclusion: increasingly a large percentage of people are obtaining their information about candidates from paid political announcements. How soon will it be, then, until the whole American democratic system becomes endangered because public relations firms across the country are able to control election outcomes?

This danger relates directly to the theme of democracy, also being considered by the White House Conference. PR firms and paid political announcements are somewhat new influences on our society, but the need for informed citizens has had a long history. In 1789, Thomas Jefferson wrote, "Were it left to me to decide whether we should have a government without newspapers, or newspapers without a government, I should not hesitate a moment to prefer the latter. But I should mean every man should receive those papers and be capable of reading them."

In our society today, the majority of people can read, but many still question if their vote makes a difference; or, even if they want to make a difference they cannot, because they cannot differentiate between candidates' positions or judge the accuracy of sharply differing points of view in a bond issue. U.S. Representative Major R. Owens reiterated the cause of this problem when he said

> *Information literacy is needed to guarantee the survival of democratic institutions. All men are created equal but voters with information resources are in a position to make more intelligent decisions than citizens who are information illiterates. The application of information resources to the process of decision making to fulfill civic responsibilities is a vital necessity.*

The need to be information literate, of course, also applies to another White House Conference – productivity. There is example after example of money being lost or gained because of the quality of decision making that was based on the information at hand. Not only is there a workforce that is increasingly unprepared to deal effectively with the challenges of high-tech equipment, but this same workforce is also often incapable of making good decisions or of adjusting to necessary job changes. Since America can never again successfully dominate third world countries in the manufacturing arena, its hope must rest in its ability to produce workers who are confident managers of information and, thus, better decision makers at all levels. Yet tests have led some analysts to conclude that

> *unless improvements are made in American education, the labor force will become progressively less capable of doing highly skilled work as the proportion of poorly education, low-income workers increases throughout the remainder of the century.*

Perhaps more important, the present inequalities, if not ameliorated, could lead to a society more deeply divided along racial and socioeconomic lines, with the number of low-income, low-achieving persons increasing from year to year.

This major study of 21- to 25 year-olds documented a relatively strong and uniform relationship between literacy proficiencies and the ability of young adults to be successful members of the American workforce. These test results also reinforced the fact that literacy gaps are and will in the future be a major factor in determining disparities in employment and incomes.

A National Agenda

What must this country do to attain literacy levels that will allow its citizens to lead rewarding lives, its democracy to flourish, and its workforce to compete internationally? The answer is obviously complex and will require the working together of many people and organizations. Ultimately, however, if America and its culturally rich citizenship are to prosper in the 21st century, we must individually and collectively face and resolve two major issues.

First, current educational reform efforts must be reexamined in light of the ever-changing, information-abundant environment in which current and all future generations must exist. As one of the foremost observers of the information society, Harland Cleveland wrote

Education is the drive wheel of the informatized society. With information now our dominant resource in the United States, our leadership at home depends on how many of us get educated for the new knowledge environment, and how demanding and relevant and continuous and broad and wise (not merely knowledgeable) our learning is.

This education for the new knowledge environment must begin in elementary school and continue through college and beyond. The current heavy reliance on prepacked information must give way to learning that prepares children for lifelong learning in an ever-changing information-rich environment. Throughout all levels of learning, the emphasis needs to be placed upon resource-based learning - learning that is based on the information resources of the real world and learning that is active and integrated, not passive and fragmented.

To all thoughtful people, it must be clear that teaching children facts is a poor substitute for teaching children how to learn and think for themselves. In other words, children must have the ability to locate, evaluate and effectively use information. It is the information society's equivalent to the adage: "Give a person a fish and you have fed him for a day. Teach him to fish and you have fed him for a lifetime."

What is called for is not a new information studies curriculum, but rather a restructuring of the learning process. Such a learning process would actively involve students in recognizing a need for information, finding and identifying the needed information, evaluating it, organizing it and using it effectively to address the problem or need at hand. Such a restructuring of the learning process will not only enhance the critical thinking skills of students, but also will empower them for lifelong learning and the effective performance of professional and civic responsibilities.

Such resource-based learning pushes back the walls of the classroom to encompass the resources of not only the school library media center, but also of the community and the world as well. It also has the advantage of allowing students to explore a variety of materials to achieve learning objectives. This flexibility is important because of the differing learning abilities present in a typical classroom, for among any 25 students, a single textbook or lecture will be too hard for some and too easy for others. Moreover, the many formats in which information appears allow for variances in preferred learning styles among students who may, for example, learn more comfortably with visual materials or computer-assisted media than by relying solely on print materials.

The second issue which must be addressed is that every community, school and academic institution must ensure easy access to the universe of information through adequately staffed and funded library media centers. Libraries, which provide a significant public access point to this universe of information and usually at no cost to the individual user, must play a key role in preparing people for the demands of today's information society. Just as public libraries were once a means of education and a better life for many of the over 20 million immigrants of the late 1800s and early 1900s, they remain today as the potentially strongest

and most far-reaching community resource for lifelong learning.

Nationally respected educator, Ernest Boyer, has written that, "The quality of a college is measured by the resources for learning on campus and the extent to which students become independent, self-directed learners." His admonishment applies equally as well to the K-12 sector and underscores the two ingredients essential to resource-based learning.

The first ingredient is adequate learning resources available in a wide range of formats. At all levels of learning, success in this area will require not only adequate funding for collections and accessing online databases, but it also will require networking capabilities that promote resource sharing among institutions. No library can be self-sufficient. In order to support specialized learning and research interests that transcend local holdings, funding policies must be changed. For example, at the federal level, policies should acknowledge citizens' rights to information by aggressively promoting free public access to information produced with taxpayers' dollars and aggressively building a national information infrastructure. At the state level, funding incentives need to be established to encourage resource sharing by, for example, adequately compensating net lenders of materials. In addition, cooperation among school, public and academic libraries will be increasingly important in any given community.

However, important as access to needed information resources is, it will not be enough to meet current social and business needs without sufficient numbers of librarians and information specialists who can spearhead efforts to promote information and related critical thinking skills. Teachers, who are the pedagogical and subject specialists, need to partner with those whose expertise is in information, its organization and its related technologies. Teachers' subject strengths can be complemented by the information connectivity ability of librarians. Such partnerships would allow the learning objectives for a course to be achieved through the use of real-world resources.

To achieve such partnerships, it is essential that the country's elementary and secondary school leaders refrain from using their library media centers as a "babysitting" service to accommodate teacher prep periods; rather they should ensure flexible scheduling for their centers. Provision must also be made to ensure sufficient support staff to allow school librarians adequate time to work with teachers as lesson plans are developed. On college campuses, organizational structures need to foster the integration of information resources and services, because academic partnerships must include faculty members, librarians and media and computer specialists.

It is unfortunately true, however, that such partnerships and related restructuring are difficult to achieve because of lingering image problems. Many educational leaders do not perceive librarians as dynamic contributors within the learning process. Such leaders are caught in their own traditional experiences of education; and, when confronted with difficult financial decisions, often they see only the accessibility of information resource funds as an easy solution to budget cuts rather than considering personnel cuts or the challenge of significant restructuring.

It is likely that the White House Conference delegates could provide no greater service to America's future than to issue a clarion call for educational leaders and their national associations to address questions of information access and information literacy for all levels of today's students. Certainly those committed to educational restructuring and improvement should be challenged to explore aggressively the potential of resource-based learning.

Finally, information literacy is a means of personal and national empowerment in today's information-rich environment. It allows people to verify or refute expert opinion and to become independent seekers of truth. It provides them with the ability to build their own arguments and to experience the excitement of the search for knowledge. It not only prepares them for lifelong learning; but, by experiencing the excitement of their own successful quests for knowledge, it creates in people the motivation for pursuing learning throughout their lives. Information literacy is, therefore, the next logical step in all current programs to combat illiteracy. After we teach people to read, we must teach them how to locate and use the information they need. Leaders in current literacy programs should be encouraged to respond to this greater challenge.

A Closing Thought

America will not disintegrate tomorrow if information literacy and resource-based learning

continue to remain largely invisible to and unsupported by civic and educational leaders. No catastrophic event will strike next week or next month. But as the information overload increases, as information resources further fragment, and as the need to access information globally grows, the ability of individuals and businesses to control their futures will be further eroded. The impact, as usual, will be felt most quickly and most deeply by those who are already socially, educationally and economically disadvantaged. The gap between the haves and have nots will widen as a new information elite emerges. Ultimately, however, we will all suffer, because the social and economic drain of a large nonfunctioning group of citizens has and will increasingly exact a heavy toll upon everyone's standard of living and our democratic way of life.

This White House Conference on Library and Information Services offers a once in a lifetime opportunity to address the above deep-rooted and growing problems through ensuring more effective use of library and information services. But significant progress can only be made through the judicial passing of recommendations reinforced by a firm resolve for implementation on the part of all delegates as they return home. In our global community we must be our brother's keeper; and from those to whom this responsibility has been given, much must be expected.

This paper borrows heavily from two sources, and readers are encouraged to obtain and read them in their entirety.

American Library Association Commission on Information Literacy, *Final Report*, January, 1989. For single free copies write Information Literacy, American Library Association, 50 East Huron Street, Chicago, Illinois 60611. (More information on the National Forum on Information Literacy may also be obtained from this address.)

Richard L. Venezky, Carl F. Kaestle and Andrew M. Sum, *The Subtle Danger: Reflections on the Literacy Abilities of American's Young Adults*, January 1987. Copies are on sale for $9.00 from the Center for the Assessment of Educational Progress (CAEP), P.O. Box 6710, Princeton, New Jersey 08541-6710.

The following may also of interest:

Harlan Cleveland, *The Knowledge Executive: Leadership in an Information Age* (New York: Dutton, 1985). The passage quoted from that book

appears on p. xviii.

Dr. Patricia Senn Breivik

Dr. Breivik is a leader in the field of information literacy. She has served as the Chairperson of the American Library Association "Presidential Committee on Information Literacy" and has been a program evaluator for the U.S. Department of Education.

A published author, Dr. Breivik received the 1990 G.K. Hall Library Literature Award for her book Information Literacy: Revolution in the Library, which she co-authored with E. Gordan Gee, President of the University of Colorado. Among her other awards are the 1990 American Council on Education Service Award and the Columbia University School of Library Service 1989 Alumni Award.

Dr. Breivik is currently the Associate Vice-President for Information Resources at Towson State University in Towson, Maryland.

Productivity in the Information Society

by Paul E. Shay

In classical economic theory, productivity, which is expressed in terms of output per worker, is much more than a mere measure of efficiency. It is also the key determinant of economic growth, wealth creation and competitiveness. As MIT professor Paul Krugman says, "Productivity isn't everything, but in the long run it is almost everything."

A direct, causal link exists between information and productivity, where *information is a difference that makes a difference*. (Just as old news is no news, old information is not information at all; it is mere redundancy.)

In this light, my definition of productivity becomes *the application of information to an economic process or activity*. The application of information results in innovation. Technological innovation is the main source of productivity growth, and productivity growth is the main source of improvement in living standards.

Despite all the doomsday talk by economists these days, the U.S. is not in bad shape where productivity is concerned:

- While the growth rate of U.S. productivity has slowed in recent years, it is not much below the long term trend. And the productivity growth rate in U.S. manufacturing actually doubled from the 1970s to the 1980s.

- While the productivity growth rate of Japan and Germany is higher, the U.S. still leads the world in the absolute level of productivity. For example, America's real output per worker is 50 percent higher than Japan's.

What have changed, however, are the forces affecting productivity. In the Industrial Era, technological change was slow, mass markets were stable and the competition sluggish. Now everything is speeding up.

New Forces Affecting Productivity

Today the business environment has changed in fundamental ways. The three driving forces of change are (1) new technologies (especially information technologies); (2) new values and lifestyles; and (3) the new, hotly competitive global economy.

1. The new technologies. On the factory floor, the inflexible mass production lines of the Industrial Era have given way to computerized, flexible manufacturing systems (FMS) that can be reprogrammed quickly to make different products on the same assembly line. For example, a John Deere factory in Waterloo, Iowa, can assemble 30 models of tractors with 3000 options on a single production line.

In essence, FMS is the application of information technologies to the manufacturing process. It brings the full productivity of mass production to short production runs; it does not need long runs or economies of scale to pay off. This is important because three-quarters of the things manufactured in the United States today are made in runs of less than 50 items. Thus, FMS is an even bigger breakthrough than mass production itself.

The Industrial Era technologies used machines to increase our *physical* powers: strength, speed and precision. The information technologies – microelectronics, computer hardware and software and telecommunications – extend our *mental* powers. They allow us to increase our creativity and to ask "What if. . . " questions, and to think of doing things that were once unthinkable.

In the Industrial Era, men and women served the machines. In the Information Era, the machines serve us; productivity and creativity are now inextricably linked.

2. The revolution in values. The affluence of the postwar era led to the most profound societal change of this century. As Abraham Maslow predicted back in the 1940s, once people actually obtain enough of the necessities of life, they begin to seek other kinds of satisfaction.

The values of the Industrial Era focused on wealth, achievement, power and prestige. Arnold Mitchell, founder of the Values and Lifestyles (VALS) Program at SRI International, calls them Outer Directed values. In the 1960s, these materialistic values began to give way to what Mitchell calls Inner Directed values. Many people began to focus on personal growth, self-fulfillment, the quality of life and concern for the environment.

The result of this collision of values is that there is no longer a single American value system. Instead, there is an unprecedented diversity of values and lifestyles in American society.

The impact on consumer behavior has been revolutionary. The mass markets that characterized the Industrial Era have given way to what I call "stiletto" markets – highly segmented, customized markets. For example, the average U.S. family has 10 radios, ranging from hi-fi stereos to boom boxes and Sony Walkmans to radio alarm clocks and car radios.

To maintain productivity, management's imperatives are to get better information about changing markets and to respond quicker.

3. The global economy. In the years following World War II, the United States produced more than half of all the goods and services in the world's economy. Today, the U.S. share has shrunk to less than a quarter of the world's output. That means that we are no longer automatically Number 1 in the world economy; instead, we face new and powerful competitors.

We must succeed in competing in the new global economy. If we do not, our standard of living will decline. Indeed, some economists claim that this is already beginning to happen. As evidence, they cite negative trends in the affordability of housing, medical care and a university education.

The productivity race is now worldwide – and deadly serious.

The three driving forces are interacting dynamically, reinforcing each other to produce a transformation in society. . . a new era comparable only to the Renaissance and the Industrial Revolution. With the transformation affecting all of our institutions and all of our lives, how can we carve out liveable spaces? How should we act, as individuals and organizations, to survive in the new order of an information society?

Future Trends Affecting Library and Information Services

The future always casts its shadows before. If we can read the shadows correctly, we gain a substantial measure of control over the future. . . we do not have to become its helpless victims.

The five predictions that follow are not part of a far-out scenario. In every case, the beginnings of the trend – the shadows – can already be seen, although their future impacts are difficult to quantify precisely.

1. The rate of technological change will increase. The half-life of a professional – the length of time before half of what a professional knows becomes obsolete – will continue to shorten.

In the old days, a doctor could go to medical school and expect to apply his knowledge for the rest of his professional life. No longer; medicine and the other professions are changing too fast. At Hewlett Packard the half-life of an electronics engineer is now five years and that of a software engineer is two and a half years.

According to a study by Carnegie Mellon, business now spends as much on education and training as the entire U.S. higher education system spends. And the spending by business has nearly doubled in the past five years. Education is now a lifelong process and it is being carried on everywhere – not just in academic institutions.

The renaissance in education and training will create new demands on library and information services to respond to a growing appetite for updated, easily accessible, portable information.

2. A new kind of worker will emerge: the Gold Collar worker. The Blue Collar and White Collar workers of the Industrial Era will be joined by Gold Collar workers, which SRI's Robert H. Kelley defines as the highly trained, creative information workers who make a difference to the bottom lines of organizations. Among today's Gold Collar workers are the computer scientist who writes a program to scan or peruse large CD-ROM databases and the

library media specialist who works with teachers to develop better methods for classroom presentations of information.

Gold Collar workers must be managed differently. Being both entrepreneurial and intrepreneurial, they do not respond well to the carrots and sticks used by management in the Industrial Era. Smart managers will realize that key information managers "own their jobs" and do so with greater benefit to the economy.

Gold Collar workers are both the greatest producers and the greatest users of information; they insist on direct access to the very best and the very latest information in order to form their own judgments.

3. We are in the early stages of an entrepreneurial revolution. More and more people are becoming independent of large corporations, choosing to work in smaller, more entrepreneurial environments. The statistics tell a dramatic story:

o In 1950, some 93,000 new businesses were formed. Today, more than 700,000 new businesses are created each year.

o Since 1970, the U.S. has created some 40 million additional jobs – a 50 percent increase and an achievement unprecedented in economic history. Two-thirds of the new jobs have been created in companies employing fewer than 20 people, while Fortune 500 companies have actually lost employment.

Smaller, entrepreneurial businesses have greater needs for externally provided information services than large corporations, which can create and maintain their own internal information resources.

4. The U.S. is becoming a two-tier society. In the Industrial Era, we used to talk about the "haves" and the "have nots." Now, we must deal with the "knows" and the "know nots," i.e., those who know how to use the tools required to survive in the new society and those who do not.

With the high school dropout rate running at nearly 30 percent, the growth of a permanent underclass is the single greatest danger to U.S. competitiveness in the new global economy – and to peace and tranquility at home. Ways must be found to rescue the "know nots."

The Job Training Partnership program has been successful in helping unskilled adults re-enter the workforce. San Francisco's Conservation Corps is one of several promising programs to train inner city youths for successful employment. Head Start is the greatest success story of all, and many libraries are beginning to offer services for children in child care centers.

These programs and others that will be created require extensive library and information service support.

5. A third wave of migration will alter our information needs. The first wave of migration was from the farms to the cities; the second wave was from the cities to the suburbs. The third wave of migration will be from the cities and suburbs to the exurbs. Why will this happen?

o *New values and lifestyles* are leading many people to seek what they believe will be a better quality of life farther from the central cities.

o *New information technologies* are freeing companies and individuals of the need to locate in big cities. For example, most major companies have already moved their data-processing operations out of the cities.

More businesses and professions are becoming location-free. Consultants, designers, engineers, architects, artists, composers, writers (including software writers), market researchers and traders are just a few among the many workers who have found that their offices can be any place that is equipped with telephone, computer, modem, printer and a fax machine.

Information technologies make these moves possible. Library and information service providers must adapt to the changes to ensure the competitive productivity of the location-free workers. (Can libraries remain location-dependent?)

The Challenge for Library and Information Services

Information is the new strategic resource, replacing land, labor and capital. A sophisticated information infrastructure is the foundation upon which the new growth industries can be built.

The challenge to libraries as institutions is an awesome one. In an Information Era, libraries must serve as the gates to the future. But, while serving as agents to facilitate change for others, they must also change in profound ways themselves. In fact, the library of the future may bear little resemblance to the library of today.

Libraries will have to develop new services to meet the needs of the new industries and the growing, changing, more diverse population. In the future, *library* won't mean a building; it will mean a process – an interactive information service. If information use is being freed of location constraints, can libraries themselves remain location dependent? Won't it be necessary to have libraries without walls? And to remove the walls between libraries, e.g., between public, school and university libraries; and between special libraries of all types?

Might we not one day have a universal information access card, like a credit card, that makes available any type of information from any location through a wide variety of access points? What effect would such a universal information utility have on productivity?

RECOMMENDED READING

On productivity
Baumol, William J., Blackman, Sue Anne Batey; and Wolff, Edward N. *Productivity and American Leadership: The Long View.* Cambridge, MIT Press, 1990.

On the new technologies
Gilder, George. *Microcosm: The Quantum Revolution in Economics and Technology.* New York, Simon and Schuster, 1989.

On values and lifestyles
Mitchell, Arnold. *The Nine American Lifestyles: Who We Are and Where We Are Going.* New York, Macmillan, 1983.

On the global economy
Ohmae, Kenichi. *Triad Power.* New York, Macmillan, 1985.

Paul E. Shay

Paul Shay is a futurist and consultant in Silicon Valley, California, who has been a university professor, foreign correspondent, editor of a business magazine and a newspaper, an entrepreneur and Vice President of SRI International.

While at SRI, Shay founded a famous futures program, the Business Intelligence Program, which is supported by hundreds of companies and governments worldwide. He was also involved in the creation of SRI's Values and Lifestyles (VALS) Program, which has led the nation in research on changing American values.

Shay, who speaks four languages, has lectured on three continents and has written on leading-edge technologies, such as computing and factory automation. He is also a recognized expert on future trends in the workforce and new education/training/ management techniques. He is currently writing a book, *The Next Society*, incorporating all of these themes.

Shay is a Rhodes Scholar and has studied at Yale University, the Sorbonne in France, Heidelberg in Germany and Oxford in Great Britain.

NOTES

The White House Conference on Library and Information Services
1111 18th Street, NW, Washington, DC
(202) 254–5100 (800) WHCLIS2

BEST COPY AVAILABLE